UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,833	01/25/2007	Franz Koch	27181-0063	6828

59582 7590 02/03/2009

DICKINSON WRIGHT PLLC
38525 WOODWARD AVENUE
SUITE 2000
BLOOMFIELD HILLS, MI 48304-2970

EXAMINER	
GIRARDI, VANESSA MARY	
ART UNIT	**PAPER NUMBER**
2833	

MAIL DATE	DELIVERY MODE
02/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,833	KOCH, FRANZ	
	Examiner	Art Unit	
	Vanessa Girardi	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *December 9, 2008 (Response to NF)*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 January 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date __.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Examiner acknowledges and appreciates the amendment filed on December 9, 2008 including:

- New, more descriptive title.
- Amendments to the Abstract overcoming previously held objection.
- Amended claims 1-3, 5., 9 and 10 and new claim 13.

Claim Objections

- Claim 13 is objected to because an "arraignment" is excessive at this point in the prosecution.
- Claim 5 is objected to because it refers to respective magnets in plural yet the plurality of each type of magnet is introduced in claim 2.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1 and 4-6 are rejected under 35 U.S.C. §102(e) as being anticipated by Kondo et al. (US 6,897,370).

With respect to claim 1; Kondo et al. [FIG. 5] discloses a contact arrangement **41, 42** comprising a battery **2** and an electrical line **11**, the battery **2** having a connection terminal **41** for connecting the electrical line **11**, the electrical line **11** having a connection piece **42** for connection to the connection terminal **41**, the connection piece **42** having a permanent magnet **44**, the connection terminal **41** an electromagnet **43** including a core and a magnet coil [FIG. 4], the permanent magnet **44** of the connection piece **42** is associated with the electromagnet **43** of the connection terminal **41**, the permanent magnet **44** exerting a magnetic

force for the purpose of retaining or repelling the core, and the electromagnet **43** counteracts the force effect of the permanent magnet **44** owing to the supply of current **28**, such that it is possible for the connection terminal **41** to attract or repel the connection piece **42**.

With respect to claim 4; Kondo et al. [FIG. 4] discloses the connection piece **42** has an electrically conductive contact piece [ON EITHER SIDE OF THE MAGNET **44**], in that the connection terminal **41** has an electrically conductive contact piece [PROTRUDING ON EITHER SIDE OF THE MAGNET **43**], in that the contact pieces have contact faces, and in that, in the contact state, the contact faces of the contact pieces bear against one another and make electrically conductive contact with one another [AS INDICATED BY THE WIRING THAT CONNECTS THROUGH TO EACH AND TO TERMINALS PROTRUDING FROM **42**].

With respect to claims 5 and 6; Kondo et al. [FIG. 5] discloses the permanent magnet[[s]] **44** and the core[[s]] of the electromagnet[[s]] **43** associated with one another in the connection piece **42** and the connection terminal **41** have magnetic polarizations which bring about mutually repelling/attracting magnetic forces [COLS. 4 & 5, LINES 61-67, 1-21].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2, 3, 7-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kondo et al. (US 6,897,370) in view of Fritsch et al. (US 5,829,987).

With respect to claims 2, 7-9; the contact arrangement of Kondo et al. as applied to claim 1 above does not show a plurality of both permanent magnets and electromagnets.

Fritsch et al. shows a contact arrangement having a connection terminal **2** for connecting an electrical line **9**, the electrical line **9** having a connection piece **1** for connection to the connection terminal **2**, the connection piece **1** or the connection terminal **2** has four magnets **5, 17** symmetrically arranged in a circle [FIGS. 3 & 4] around the respective contact piece **14, 18**, in that the magnets **5, 17** of the connection terminal **2** or the connection piece **1** is associated with the magnets **5, 17** of the connection piece **1** or of the connection terminal **2**, exerting a magnetic force such that it is possible for the connection terminal **2** to *attract or repel* the connection piece **1** [COLS. 1 & 2, LINES 52-68, 1-8].

Fritsch et al. further shows the magnets **5** are set back from the contact face [FIG. 2] of the connection piece **1** via a spacer layer **6**; such that in the contact state [FIG. 3], only the contact pieces **14, 18** of the connection piece **1** and of the connection terminal **2** come into contact with one another.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the contact arrangement of Kondo et al. to have a plurality of both permanent magnets and electromagnets symmetrically arranged as taught by Fritsch et al. [COLS. 1 & 2, LINES 52-68, 1-8] thereby producing a more reliable connection which is less susceptible to occurrences of misalignment during activation / deactivation.

With respect to claim 3; Kondo et al. as modified by Fritsch et al. has been discussed above. Kondo et al. further shows only an electromagnet **43** is arranged in the connection terminal **41** and only a permanent magnet **44** is arranged in the connection piece **42**.

3. Claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kondo et al. (US 6,897,370) and Fritsch et al. (US 5,829,987) in view of Harbauer (US 4,318,065). The contact arrangement of Kondo et al. as applied to claim 1 above does not show the connection terminal **41** comprising a plurality of electromagnets and as such there is no teaching on the manner in which the electromagnet coils are wired to one another.

Fritsch et al. shows an electromechanical contact arrangement having a connection terminal **2** and connection piece **1** comprising a plurality of magnets **5, 17** symmetrically arranged in a circle [FIGS. 3 & 4] around the respective contact piece **14, 18**, exerting a magnetic force such that it is possible for the connection terminal **2** to *attract or repel* the connection piece **1** [COLS. 1 & 2, LINES 52-68, 1-8].

However Fritsch et al. does not show the circuitry connecting the plurality of magnets.

Harbauer teaches a circuit arrangement in which electromagnets are wired in series [FIG. 1].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the contact arrangement of Kondo et al. to have a plurality of both permanent magnets and electromagnets symmetrically arranged as taught by Fritsch et al. [COLS. 1 & 2, LINES 52-68, 1-8] thereby producing a more reliable connection which is less susceptible to occurrences of misalignment during activation / deactivation; hence further modifying the contact arrangement of f Kondo et al. such that the plurality of magnets are wired in series thereby producing an arrangement wherein contact between the connection piece and connection terminal can be selectively actuated as taught by Harbauer [ABSTRACT]; thereby providing means for safeguards within the circuit arrangement [COL. 3, LINES 1-10].

4. Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kondo et al. (US 6,897,370). Kondo et al. [FIG. 5] shows a connection ~~arraignment~~ arrangement configured to be coupled to a battery **2** having a connection terminal **41** includes an electromagnet **43** rather than a permanent magnet as claimed, the connection arrangement further comprising an electrical line **11** having a connection piece **42**, where the connection piece includes a permanent magnet **44** rather than an electromagnet as claimed, yet both magnets are configured to be coupled to each other, the electromagnet **43** having a core and a magnet coil [FIG. 4], wherein the electromagnet **43** counteracts the magnetic force of the permanent magnet **44** owing to the supply of current **28**, such that it is possible for the connection piece **42** to attract or repel the connection terminal **41**.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection arrangement of Kondo et al. thus reversing which portion of the connection arrangement housed the electromagnet and which housed the permanent magnet, since it has been held that mere reversal of well-known parts is obvious particularly in the absence of any disclosure regarding criticality of there being a required arrangement that being, which magnet is housed in which part of the connection arrangement, such modification is held to be an obvious expedient,

In re Gazda, 219 F.2d 449, 104 USPQ 400 (CCPA 1955)

Response to Arguments

Applicant's arguments with respect to claims 1-10 and 13 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa Girardi: Telephone number (571) 272-5924.

Monday – Thursday 7 a.m. to 5:30 p.m. (EST)

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Renee S. Luebke can be reached on (571) 272-2009.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VG
Art Unit 2833
January 28, 2009

/Briggitte R. Hammond/

Primary Examiner, Art Unit 2833